FUTURE READY

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We help change the way people see libraries.
About Me
Entrepreneur, Librarian, Innovator

Nice to meet you

• 16 – First job was within a library as a page.
• 18 – Director of IT for the Library.
• 21 – Build an interactive library space
• 22 – Explore the impact of start-ups to libraries.

Now I get to help libraries around the world with leadership strategies, funding and partnership initiatives, makerspaces and solve spaces, and IT tech trends/security.
Evolve Project

The Challenge:

- Renovate the entire Children’s library with a budget of a 165,000 to include all new technology, furniture, space layout, and fresh colors.
- Introduce new technology frequently and host workshops sharing the technology.
- Teach patrons new skills as it relates to coding, electricity, engineering, or creative art.
- Build hype about the evolving library.

Changing the way people see libraries
Purpose of Today
Why are we here?

What does Future Ready mean to you?

- What are the components of a Future Ready plan
- A story of Future Readiness
- Taking Future Ready from Maker Spaces and building towards Solve Spaces and Global Sustainability Goals
Resources for a Future Ready Library
...puts school librarians on the leading edge of the digital transformation of learning.

About

Future Ready Schools (FRS) is a bold effort to maximize digital learning opportunities and help school districts move quickly toward preparing students for success in college, a career, and citizenship. FRS provides districts with resources and support to ensure that local technology and digital learning plans align with instructional best practices, are implemented by highly trained teachers, and lead to personalized learning experiences for all students, particularly those from traditionally underserved communities. FRS is led by the Alliance for Excellent Education in collaboration with a vast coalition of organizations.

- **Main Website**
  - https://futureready.org/program-overview/librarians/
  - https://www.smore.com/b4c6k-fueling-future-ready-librarians

- **PDF Resource**
  - https://mkrbk.tech/frl

- **Additional Information (Webinar/Slides from Shannon Miller)**
  - https://mkrbk.tech/frl_webinar
FUTURE READY LIBRARIAN SUPPORT STUDENT-CENTERED LEARNING

LITERACY
Inspires and supports the reading lives of both students and teachers
- Creates inclusive collections that acknowledge and celebrate diverse experiences and provide instructional opportunities to empower learners as effective users and creators of information and ideas.

CURRICULUM, INSTRUCTION, AND ASSESSMENT
Curates Digital Resources
- Leads in the selection, integration, organization, and sharing of digital resources and tools to support transformational teaching and learning and develops the digital curation skills of others.

Builds Instructional Partnerships
- Partners with educators to design and implement evidence-based curricula and assessments that integrate elements of deeper learning, critical thinking, information literacy, digital citizenship, creativity, innovation, and the active use of technology.

Empowers Students as Creators
- Encourages and facilitates students to become increasingly self-directed as they create digital products of their learning that engage them in critical thinking, collaboration, and authentic real-world problem solving.

PERSONALIZED PROFESSIONAL LEARNING
Facilitates Personalized Professional Learning
- Leads professional learning to cultivate broader understanding of the skills that comprise success in a digital age (e.g., critical thinking, information literacy, digital citizenship, technology).

ROBUST INFRASTRUCTURE
Ensures Equitable Digital Access
- Provides and advocates for equitable access to collection tools using digital resources, programming, and services in support of the school district’s strategic vision.

BUDGET AND RESOURCES
Invests Strategically in Digital Resources
- Leverages an understanding of school and community needs to identify and invest in digital resources such as books and ebooks to support student learning.

COMMUNITY PARTNERSHIPS
Cultivates Community Partnerships
- Cultivates partnerships within the school and local community (including families and caregivers, nonprofit organizations, government agencies, public and higher education libraries, businesses) to promote engagement and a community of readers.

DATA AND PRIVACY
Advocates for Student Privacy
- Teaches and promotes student data and privacy through his or her instruction and role as an educational leader.

COLLABORATIVE LEADERSHIP
Leads Beyond the Library
- Participates in setting the school districts vision and strategic plan for digital learning and fosters a culture of collaboration and innovation to empower teachers and learners.

USE OF SPACE AND TIME
Designs Collaborative Spaces
- Provides flexible spaces that promote inquiry, creativity, collaboration, and community.
**Future Ready Library - Application**

**Key Points**

- **Robust Infrastructure**
  - Redundant and secure network. Built to reduce costs and save money for future projects.

- **Budget and Resources**
  - Focus on removing less essential systems/services and make an investment for the future.

- **Community Partnerships**
  - Leverage communities both local and in other states to build a better educational system and environment.

- **Use of Space & Time**
  - Redesign the library to be more interactive and engaging.

- **Data and Privacy**
  - Talk about Data and Privacy and drive awareness.
Robust Infrastructure
Future Ready Use Case

Redundant and secure network. Built to reduce costs and save money for future projects.
77% of Americans own a Smart Mobile Device

What does this mean to our infrastructure?
Robust Infrastructure
Building a strong technology back-bone

Redundant, Secure, Cost Effective

It’s important to build a local infrastructure that can support learning but also ensure ease of access for all students outside of the school.

*4G Cards + Laptops Loaner Programs (Verizon) (e-funding)
Low cost hardware and equipment (used devices are OK)

Work with your vendors on better pricing models

Provides and advocates for equitable access to collection tools using digital resources, programming, and services in support of the school district’s strategic vision.
Budget and Resources

Future Ready Use Case

Focus on removing less essential systems / services and make an investment for the future.
Budget and Resources – its more than just money
Budget and Resources

Various Infinity Symbols included in template

Shifting Priorities on Expenses
Evaluate current offers (surveys, Net Promoter Scores, and more) to understand what users want.

Crowd Funding
Ask for donations from local groups towards library initiatives and goals.
“Fifty for Fifty Campaign”

Working with Vendors
Negotiate better offerings, win-win negotiations, agree to share feedback / white papers, pilot programs.
“There’s plenty of fish in the sea”

Sweat Equity
Leverage your fellow employees, users, students, to help build solutions.
Community Partnerships
Future Ready Use Case

Leverage communities both local and in other states to build a better educational system and environment.
The Art of Asking

Amanda Palmer

http://www.ted.com/talks/amanda_palmer_the_art_of_asking

“Don't make people pay for music, says Amanda Palmer: Let them. In a passionate talk that begins in her days as a street performer (drop a dollar in the hat for the Eight-Foot Bride!), she examines the new relationship between artist and fan.” – TED Talks
Community Partnerships
Time, Resources, Funding

Local Community
Have individuals with hobbies / skill sets share their passions to your students/users

Connect with Others
Don’t re-invent the wheel twice. Ask for help from neighboring schools/libraries in curating resources

Financial Support
Not all companies and organizations can donate money but they may be able to donate or loan their products
Use of Space and Time
Future Ready Use Case

Use of Space & Time

Redesign the library to be more interactive and engaging.
Use of Space and Time

If you build it, they will come
Spaces and Technology Must:
Every space should include these five components

When thinking of your spaces...
You want to incorporate these five pillars to create a more cohesive environment.

Spaces include physical space + digital spaces, which include educational technology, both software and hardware to encourage tangible play and exploration.
Creation and Inventions
Your spaces and tools should allow patrons to foster creative ideas and build new inventions
Discovery
The space and tools need to allow patrons to learn by play and to discover by experience.
Collaboration
Technology is inherently collaborative, bringing people together to work in unison to solve problems.
Interaction
Technology and spaces need to be interactive and intuitive in order to thrive in a makerspace.
Innovation
Innovation must be an original disruptive act.
Key Design Concepts
When thinking of spaces and time, consider these easy wins:

Redesigning Your Spaces

• **Adding Color**
  – can liven up the space and make it more inviting

• **Art**
  – allow users to create and show case their art

• **Have Open and Modular Areas**
  – makes the space more collaborative

• **Interactive Technology!**
  – enable users to explore and safely fail
IT'S...

...BEAUTIFUL
Art for your Library

Allow Users to Showcase Creations

- Have patrons create the art and donate it to the library
- Mix it up as often as you like. There is very little cost.
- Patrons (often younger ones) will feel like their work has been “published”
- Sense of ownership with the library
- They will become marketers for your library
Open Areas

Open Space!

Seating
Tables
Multi Functional Areas

Remove or repurpose rooms that are used only for specific events:
Activity Rooms, Meeting Rooms, etc
Make these rooms open all the time with constant activities or events

Larger, open areas allow you to rearrange space easier
Let the community define the space
**Data and Privacy**

**Future Ready Use Case**

- **Robust Infrastructure**: Redundant and secure network. Built to reduce costs and save money for future projects.
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- **Data and Privacy**: Talk about Data and Privacy and drive awareness.

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Evolve Project | Brian Pichman
Data and Privacy
Future Ready Use Case

Talk about Data and Privacy and drive awareness
SHOULDN'T HAVE GOOGLED THAT
I SHOULD NOT HAVE GOOGLED THAT
made on imgur
DATA RECORDS COMPROMISED IN FIRST HALF OF 2016

5,544,544,942

3,046,456 records lost or stolen every day
126,936 records every hour
2,116 records every minute
35 records every second

http://breachlevelindex.com/assets/Breach-Level-Index-Infographic-H1-2016-1500.jpg
DATA RECORDS COMPROMISED IN FIRST HALF OF 2017

1,901,866,611

10,507,550 records lost or stolen every day
437,815 records every hour
7,297 records every minute
122 records every second

LESS THAN 5% of breaches were “Secure Breaches” where encryption rendered the stolen data useless
Why do People Attack?

Financial Gain
• Stocks
• Getting Paid
• Selling of information

Data Theft
• For a single person
• For a bundle of people

Just Because
• Malicious
Taking Future Ready Libraries...
... to Solve Spaces to prepare for a better global future
Time Lines Of How We Got To Maker Spaces

1 Million Years Ago
Invention of Fire
One of the first inventions was considered fire

1980s
Hacking Movement
Taking things apart, rebuilding, looking at improving by breaking down existing things

1990s
Hoard ing of Ideas
Lots of idea building, often kept secret behind patents and NDAs

2000s
Maker Movement
Taking the innovators and designers and blending them with the hackers to create new things
Successful Library Initiatives

Something for you

EDUCATION
Libraries all over have been able to educate their users and community in new and exciting ways that lead to job growth by remove skill gaps and introduced opportunities for younger patrons.

DEVELOP
Libraries such as Fayetteville Free Library Library have participated in national robotics competitions. Others spawn off business ideas and bring revenue into community.

3D PRINTING
There are tons of success stories of library patrons 3D printing out prosthetics or handicap aids for people in need.

LEADING EDGE
Libraries are in a unique space to offer services that most departments can’t tackle. Leveraging resources and connections can enable you to reach new heights.
The idea of taking a maker space and turning it into a solver space; by building tangible solutions to community based issues – solving poverty, water quality, homelessness, creating equality, etc.
What is the Sustainability Goals?
Make the world better

2030 Goals

In 2015, countries adopted the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals. In 2016, the Paris Agreement on climate change entered into force, addressing the need to limit the rise of global temperatures.

Sustainable development calls for concerted efforts towards building an inclusive, sustainable and resilient future for people and planet.
Resources
https://www.un.org/sustainabledevelopment/

THINGS YOU CAN DO FROM YOUR COUCH

- Save electricity by plugging appliances into a power strip and turning them off completely when not in use, including your computer.
- Stop paper bank statements and pay your bills online or via mobile. No paper, no need for forest destruction.
- Share, don’t just like. If you see an interesting social media post about women’s rights or climate change, share it so folks in your network see it too.
- Speak up! Ask your local and national authorities to engage in initiatives that don’t harm people or the planet. You can also voice your support for the Paris Agreement and ask your country to ratify it or sign it if it hasn’t yet.

THINGS YOU CAN DO AT WORK

- If you have a fruit or snack that you don’t want, don’t throw it out. Give it away to someone who needs and is asking for help.
- Does everyone at work have access to healthcare? Find out what your rights are to work. Fight against inequality.
- Mentor young people. It’s a thoughtful, inspiring and a powerful way to guide someone towards a better future.
- Women earn 10 to 30 per cent less than men for the same work. Pay inequality persists everywhere. Voice your support for equal pay for equal work.
- 4 billion people lack access to basic sanitation services. Lend your voice to talk about the lack of toilets in many communities around the world!
For sustainable development to be achieved, it is crucial to harmonize three core elements. These elements are interconnected and all are crucial for the well-being of individuals and societies.
#1: End poverty in all its forms everywhere
#2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
#3: Ensure healthy lives and promote well-being for all at all ages
#4: Ensure inclusive and quality education for all and promote lifelong learning
#5: Achieve gender equality and empower women and girls
#6: Ensure access to water and sanitation for all
#7: Ensure access to affordable, reliable, sustainable and modern energy for all
#8: Promote inclusive and sustainable economic growth, employment and decent work for all
#9: Build resilient infrastructure, promote sustainable industrialization and foster innovation
#10: Reduce inequality within and among countries
#11: Make cities inclusive, safe, resilient and sustainable
#12: Ensure sustainable consumption and production patterns
#13: Take urgent action to combat climate change and its impacts
#14: Conserve and sustainably use the oceans, seas and marine resources
#15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss
#16: Promote just, peaceful and inclusive societies
#17: Revitalize the global partnership for sustainable development
Each goal is important in itself ...
Each goal is important in itself ...

And they are all connected
What if....
You leveraged your space to help educate and build solutions to the global goals?

All stakeholders: governments, civil society, the private sector, and others, are expected to contribute to the realization of the new agenda.

A library space can be used to let people meet up, invite outside resources, use maker tools, and run sessions to educate either employees and their families or even the community.
THANKS FOR ATTENDING
Questions / Contacts
Feel free to reach out!

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slideshare.net/bpichman

OTHER TALKS

THURSDAY OCTOBER 18, 2018
10:15 a.m. - 12:15 p.m @ San Carlos 3
B301/B302 From Makerspace to Solve Space: A Road Map

2:30 p.m. - 3:15 p.m. @ San Carlos 3
B304: What’s Next? Post Makerspace

Friday: Solve Session @ Monterey Public
Ask me for details